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ERIC/CRIER INFORMATIONAL PUBLICATIONS. CUMULATIVE EDITION, 1966-67.

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A CUMULATIVE EDITION, CONTAINING TWO "INFORMATION BRIEFS" AND THREE "NEWSLETTERS," OF THE 1ST YEAR'S PUBLICATIONS OF ERIC/CRIER IS PRESENTED. THE EDUCATION RESOURCES INFORMATION CENTER/CLEARINGHOUSE ON THE RETRIEVAL OF INFORMATION AND EVALUATION IN READING IS A JOINT PROJECT BETWEEN THE INTERNATIONAL READING ASSOCIATION AND INDIANA UNIVERSITY IN COOPERATION WITH THE U.S. OFFICE OF EDUCATION (USOE). THE MAIN TOPICS DISCUSSED ARE THE ORGANIZATION AND GOALS OF ERIC/CRIER, THE NEW USOE PUBLICATION--"RESEARCH IN EDUCATION," THE CLEARINGHOUSES WHICH COMPRISE THE ERIC INFORMATION SYSTEM AND THE AREAS OF EDUCATION WITH WHICH THEY WORK, THE PROCEDURE FOR OBTAINING MICROFICHE AND HARD COPY REPRODUCTIONS OF DOCUMENTS IN THE ERIC COLLECTION, AND THE AVAILABILITY OF MICROFICHE READERS. OF SPECIAL INTEREST IS "INFORMATION BRIEF NUMBER I" WHICH INVITES READERS TO AID IN THE ACQUISITION OF SIGNIFICANT MATERIALS ON READING, BOTH PUBLISHED AND UNPUBLISHED. INFORMATION ON THE TYPES OF MATERIALS DESIRED AND DIRECTIONS FOR SUBMITTING THEM ARE GIVEN. (RH)

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CUMULATIVE EDITION 1966-67

ERIC/CRIER INFORMATIONAL PUBLICATIONS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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ERIC CRIER

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The Clearinghouse on Reading is a project of the International Reading Association and Indiana University in cooperation with the Educational Resources Information Center. The establishment of a communication link between [illegible] and the Clearinghouse was an important [illegible] first year of operation. The three issues of the ERIC/CRIER Newsletter and the Information Brief series are the initial publications of the Clearinghouse. Others will be added as the need for them arises. This cumulative edition has been developed in response to the many requests received for a complete set of the first year's publications. Both the Newsletter and the Information Brief will continue to be published during the second year of the project.

Leo C. Fay, Edward G. Summers
Directors, ERIC/CRIER

INFORMATION BRIEF

Number 1 December, 1968

AN ACQUISITIONS NETWORK FOR READING

The purpose of this information brief is to invite you to become a contributor to a significant project on reading. ERIC/CRIER is currently being organized as part of a major effort to improve the collection, organization, and dissemination of information in all areas of education.

Background Information

The ERIC Clearinghouse on Retrieval of Information and Evaluation on Reading is engaged in an experimental project to design services which will be of use to those interested in obtaining information on reading. The project is a joint effort between the International Reading Association and Indiana University in cooperation with the USOE. The enclosed brochure describes ERIC/CRIER in detail. Please read it carefully for necessary background information. You may already have been alerted to the total ERIC project or to the activities of the twelve professional clearinghouses through other sources.

ERIC/CRIER activities are built upon two broad objectives. The first objective includes the identification, collection, organization, and dissemination of information and evaluation on reading. The second includes the analysis and synthesis of information and, in addition, the creation of information in areas where need exists but where existing information and data may be meager. The Clearinghouse, for example, wishes to identify and obtain materials which could aid in decision making in improving reading practices and which could have immediate and general application in a variety of situations. In addition, the Clearinghouse will act as a catalyst in using and extending the store of emerging knowledge on reading to improve educational practices. It is particularly interested in research findings, critical analyses of experiences, and identification of important new ideas in reading.

User and Acquisition Groups

In general, the services which will be initiated by ERIC/CRIER will be useful to a variety of people working in the field of reading. Included as potential users are teachers, administrators, curriculum specialists and supervisors, clinical specialists, researchers, graduate students, college and university faculty, and the general public, to mention a few. However, the major target group will most likely include a core of individuals from all the previous areas with heavy time commitments and continued involvement in some aspect of reading whether it be teaching, teacher training, diagnosis and treatment of reading disability, or research. This core group is scattered in key positions throughout the nation. They influence thousands of teachers, potential teachers, and others. In addition to being the most logical group to make heavy use of ERIC/CRIER services, they also constitute the major source for identification of significant material on reading which should be included in the holdings of the Clearinghouse.

As explained in the brochure, ERIC/CRIER functions in a dual role. It serves as an input arm to Central ERIC and it also serves as an information analysis center and repository for the field of reading. Users will become aware of materials in the Clearinghouse files in two ways. Announcements of documents may apear in the monthly dissemination bulletins published by the USOE. These bulletins will systematically list the material which is collected from the satellite clearinghouses and organized for national distribution. The bulk of this material will be available in microfiche or hard copy form. Only about one-fourth of the total holdings of any one clearinghouse will appear in the national dissemination bulletins. ERIC/CRIER will periodically publish a newsletter which will serve as a vehicle for making its special services and holdings known and for communicating between the user group and the clearinghouse. Bulletins and announcements describing new and unique services will also be published.

Acquisitions Philosophy — Quality Control

In developing an acquisitions network for identification of significant materials on reading, the ERIC/CRIER staff and Advisory Board strongly emphasize the necessity for quality control of input. In attempting to develop an acquisitions network, they have adopted the philosophy that the person best suited to determine the potential impact and importance of a document is the individual involved in some area of reading. Thus, the acquisition concept for the Clearinghouse envisions establishing a network of individuals involved in reading scattered throughout the nation. Such individuals will constitute an initial screening in collecting and forwarding documents which become candidate materials for inclusion in the holdings of ERIC/CRIER.

The key to the establishment of useful information services in any field is the development of an effective acquisitions system to identify documents containing important information which should be included. A general, broadside solicitation requesting material on reading from a wide array of people would create considerable confusion in addition to stockpiling much extraneous and worthless material. ERIC/CRIER is vitally concerned about quality control. Its aim is to identify and make available materials which have the potential of improving and changing reading research and practices. At the retrieval level automated techniques can aid in quickly identifying documents on various topics. However if quality control is not exercised in the initial input stage, the end result is likely to be an automated "garbage can" which can quickly spew out inappropriate or insignificant documents. Quality control is closely allied to quality identification of possible documents for inclusion in the system.

ERIC/CRIER's Acquisition Network

You are invited to join the ERIC/CRIER Acquisition Network to aid in the input of materials for the reading clearinghouse. The only requirement is that you agree to bring to the attention of ERIC/CRIER, on a continuing basis, materials on reading which you feel meet the quality standards as described later. The breadth and diversity of the professional endeavor in reading and reading-related areas is directly reflected in the volume and

form of the documents analyzed in the ERIC/CRIER project. Books, curriculum guides, program descriptions, project proposals, and many other types of documents in printed and mimeograph form arrive daily from scattered sources. They have been written for many purposes and often for specialized audiences.

Materials to be Included

ERIC/CRIER is specifically interested in information and reports on reading which may be available in the following forms.

- Research and Project Proposals
- Research and Project Reports
- Materials from NDEA Institutes and Other Special Programs
- Speeches and Other Statements of Opinion or Discussion of General Issues
- Curriculum Guides/Teacher Guides
- Program Outlines/Descriptions and Administrative Reports
- School-Home/School Community Relations Materials
- Bibliographies
- Exemplary Course Related Materials
- Critical Reviews of Research

The listing is not all inclusive but suggests a number of document sources which might be of value.

Acquisition procedures have already been established to cover a number of areas. The published professional literature on reading which reports research and research-related material is being systematically scanned and included. However, significant materials appearing in published sources which do not have broad circulation (newsletters, state reading association reports, in-house college and university publications, limited circulation journals) should be reported. Reports on all Federally supported reading research projects are also automatically included in the system. This includes final reports for the most part. Reports of a preliminary or interim nature on such projects should be included for consideration in the ERIC/CRIER holdings. Material will be collected from all levels of education including pre-school, college, and adult, in addition to elementary and secondary. The scope of acquisition for ERIC/CRIER is defined in the accompanying brochure. ERIC/CRIER is particularly concerned with implementing new developments in reading by making available knowledge and experience from all disciplines. Practitioners as well as researchers will request and use material.

A clearinghouse which collects and disseminates only the published literature would be of limited value in keeping users informed of newer practices and frontier-type activities in reading. The publication lag in published materials is well known. Although these materials will also be systematically included, a major thrust is being made to acquire "fugitive" materials. Such material is often ignored completely or reaches only a limited audience. It is felt that the collection and organization of such materials in a form that is readily accessible will provide a major resource for activities ranging from research to program planning and implementation. The identification, collection, and organization of such material is admittedly a difficult task. It is not certain how much of such material exists. It is suspected that a considerable amount is available if it can be ferreted out and collected. It will take patience and determination for a professional group to contemplate working in the grey area of fugitive, unpublished material.

Criteria for Quality Control

Establishing criteria for quality control of input is difficult. Standards which are too rigid will squeeze out documents of potential significance. Loose standards will result in an overabundance of junk material. ERIC/CRIER's mission is to make information available. It will engage in analysis and evaluation, but this will be a task largely unrelated to the initial acquisition phase. The following factors seem of importance in selecting candidate materials.

1. Does the material reflect professional competence in its preparation?
2. Does the material discuss issues or projects of current significance?
3. Does the material have substance and exhibit the potential of having an impact on current concepts or practices?
4. Does the material aid in organizing and pulling together some topic or area in reading?
5. Does the material outline methodology or procedures which could be of use to others?
6. Is the material of recent origin (1960 onward) and not readily available through published sources?

Documents of both an analytic and descriptive nature can be included. The definition of what should be included for screening is deliberately broad. When in doubt, **submit** the material. Remember, a final screening of candidate materials will take place through the ERIC/CRIER professional staff. Quality of material determines the boundary between acquiring materials and actually abstracting them for wide dissemination. Separate files will be maintained ranging from highly significant materials to those of lesser importance.

Sending in Materials

Would you make an immediate search for reading materials which should be considered by ERIC/CRIER, then periodically locate and collect additional material for submission?

1. Send two copies of each document. No size restrictions apply. The material should be suitable for photographing.
2. Use the enclosed address labels when submitting materials. Note that each label is marked with an X code. When you run out of labels, use any available label, but mark it in the lower left corner with the X code. This enables us to identify sources of material and to differentiate systematic from random acquisitions.
3. A reproduction release will be obtained for any material eventually included in the collection. ERIC/CRIER will follow through on obtaining the necessary releases for material you submit.

Your name has been placed on the ERIC/CRIER mailing list to receive the newsletter and other announcements as they appear. A number of mailing lists with some overlap are being used. If you should receive two copies of this request, please pass one on to a possible contributor.

Your willingness to become involved in locating materials is appreciated. We look forward to working with you as a contributing member of the acquisitions network and potential user of ERIC/CRIER services.

Edward G. Summers
Project Director
ERIC/CRIER

ERIC CRIER NEWSLETTER

VOLUME I, NUMBER 1 JANUARY, 1967

ERIC/CRIER IS ESTABLISHED

In 1966 the Educational Research Information Center established a system of decentralized clearinghouses as part of a nationwide information system designed to serve American education. This newsletter will introduce to many readers the ERIC Clearinghouse on Retrieval of Information and Evaluation on Reading. ERIC/CRIER is a joint project of the International Reading Association and Indiana University in cooperation with the USOE.

ERIC/CRIER's goal is to organize the output of significant research, information, and resources on reading into an integrated system thus easing the educator's information problems and providing convenient access to information of specific interest. Key precepts include information analysis and organization as well as the location and collection of information.

ERIC is a nationwide information system and its over-all system design blends together certain features from the centralized document repository concept as well as aspects of the specialized information center. A network of specialized centers, backed by a centralized, coordinating body, provides unique opportunitites for the transfer of educational resources information. The specialized centers provide close contact with working educational researchers and practitioners in the field. The ERIC system will grow in the future with additional centers gradually added to the network.

The heart of the ERIC system consists of knowledgeable educational interpretors, located at the separate centers, who can collect, review, and distill information. The centers not only retrieve and disseminate information but also create new information in a given area.

The ERIC centers select and evaluate the most significant and timely information in their respective areas. Information from the centers will be uniformly processed and stored. All new projects initiated by the Bureau of Research and information about final reports from completed projects will be available through the central facilitiy.

A bulletin **Research in Education** will be available to the public through the Government Printing Office. It will contain current abstracts and indexes. The initial issues will focus on OE research projects and reports. The contents will be expanded later to include materials from the ERIC centers. Another major publication will be an historical volume listing all significant final reports submitted to the Office of Education for research activities supported since 1956.

Documents in the ERIC collection will be put on microfiche through a contract with Bell and Howell Company.* Users of the ERIC system will be able to purchase inexpensive copies in microfiche or hard copy. Documents can be ordered by using the document number which will appear in the monthly publication.

*ERIC Document Reproduction Service, Micro Photo Division, Bell and Howell Co., 1700 Shaw Avenue, Cleveland, Ohio 44112

ERIC/CRIER will carry on a number of functions as a specialized clearinghouse in addition to serving as a collection and input arm of Central ERIC. The Clearinghouse will provide various services and function as an information analysis center for reading. Key activities include:

- **Initiating publications specifically designed to aid the educator in coping with information problems in reading.**
- **Providing information on specific topics in reading through a retrieval system.**
- **Developing and periodically updating a catalog of available published instructional materials in reading.**
- **Generating summary reports on significant topics in reading.**
- **Conducting and coordinating research which focuses on topics necessitating access to the broad professional group in reading or to a comprehensive collection of documents on reading.**

Initially much of ERIC/CRIER's activity will be directed toward building the store of documents and information. As file building continues, services will be gradually initiated and announced. Broad service areas can be identified at the present. Flexibility in responding to user needs will be a key concept in establishing future services. **Only limited service will be available until late 1967.**

Much material on reading exists in the form of books and journals and is readily available to interested persons. In addition to processing current information from these sources, ERIC/CRIER will make a major effort to acquire and make available the growing volume of new material which all too often is ignored completely or reaches only a limited audience. These fugitive materials include addresses at conferences and professional meetings; instructional materials used in classes and seminars; curriculum guides, surveys, and research studies from local school systems and state education departments; articles from newsletters and other publications with limited circulation; and available instructional materials. Emphasis will also be placed on acquiring information and research on innovative and unique practices and ideas in reading.

We invite your help in acquiring **significant** documents of high **quality** on reading.

- **Keep ERIC/CRIER informed of new projects and programs that relate to research and development in reading.**

- **Send two copies of documents judged to be of sufficient quality and interest to the Clearinghouse. Materials may be of any size, shape, or form but should be clear for photographing. Recent materials (1960 onward) are requested.**
- **Inform others of the need for quality materials and the proposed services of the Clearinghouse.**

Every teacher, administrator, and researcher interested in reading should submit **quality** documents to ERIC/CRIER. The Clearinghouse wants basic and applied research reports and documents of various types giving innovative ideas and emerging programs and developments in reading. The ERIC/CRIER Advisory Board emphasizes that submitted documents must be of broad interest, demonstrate professional competence, be of recent origin, and exhibit the possibility of having impact on current concepts or practices in reading. Quality control of input is vital in developing an information system if it is to be of value to the largest possible group of users.

THE ERIC/CRIER STAFF. Last summer workmen were remodelling the second floor of an old I.U. dormitory, Pine Hall, as a home for ERIC/CRIER. (Pine Hall is a legacy to Indiana University from another federal program — World War II!) At the same time ERIC/CRIER Project Directors Leo C. Fay and Edward G. Summers were completing the recruiting of an able, varied staff to aid in building an effective information facility for the reading profession.

These are the people who came to ERIC/CRIER:

James L. Laffey is Assistant Director for Operations. He has overall responsibility for keeping the project moving ahead in accordance with established policies. Mr. Laffey hails from Pennsylvania. He completed his undergraduate work at Duquesne and graduate work for the master's and doctorate at the University of Pittsburgh. He has taught developmental and remedial reading at both the elementary and secondary levels in Pittsburgh public schools. In addition to his duties with the Clearinghouse, Mr. Laffey teaches undergraduate and graduate courses in reading at I.U.

John H. Robb came to ERIC/CRIER as Assistant Director for Systems. He did undergraduate work at Georgetown University, Washington, D. C., and graduate study in Bonn, Germany, and at Harvard University's Graduate School. He has had twelve years' experience as an information retrieval specialist with IBM and with RCA's computer division, working with computers and information retrieval research and systems design. Mr. Robb has overall responsibility for systems design: for planning the technical details of the procedures and equipment which the Clearinghouse will use in its internal operations. Currently he is working on procedures for the interrelated operations of indexing, storage, search, retrieval, and the development of a structural outline of the terminology used in the reading field.

Director of Publications for the Clearinghouse is **Catherine F. Siffin** who spent some of her first hours doodling and dreaming of "would-be inspirations" for the artist who evolved the ERIC/CRIER symbol. Mrs. Siffin has a master's in government; has worked in state government, with governmental consulting agencies, and in Indiana University's Institute of Public Administration. While in Bangkok, Thailand, she was an editor of the Proceedings of the Ninth Pacific Science Congress.

The Director of Documentation, **Bonnie J. Lewis,** and the Supervisor, **Diane D. Steffer,** both hold M.A.'s in library science from Indiana University. They also share a background of teaching experience in English at the secondary level. An almost overwhelming storehouse of 2,000 reading documents was waiting for Mrs. Lewis and Mrs. Steffer when they arrived September 1. They have developed a system for abstracting these and other reading documents, trained a documentation staff, and are involved in development of indexing strategy and in the continuing process of training, editing, and controlling the flow of documents.

Among the most energetic and enthusiastic of the ERIC/CRIER staff are the D.A.'s! Some readers may associate these initials with colorful trench-coated characters engaged in crime busting and legal wrangles. At ERIC/CRIER, D.A.'s are Document Analysts, not District Attorneys, and the things they wrangle with are reading documents! Every document which becomes a part of the ERIC/CRIER collection is studied, indexed, and abstracted by one of the ten document analysts. They are: **Margaret Burd,** who did part of her undergraduate work in Japan and is now working on an M.A. in reading; **Mabel Culmer,** Professor Emeritus of Education and former Director of the Reading Clinic at I.U.; **Martha Davis,** who is completing an M.A. in Russian history and is also working toward an M.A. in library science; **Lowell Eberwein,** who is a former teacher and elementary school principal and has completed his course work for an Ed. D. in elementary education and reading and is now writing his dissertation; **Ruth Houdeshel,** who has an M.A. from I.U. with a major in reading and has been a reading teacher in I.U.'s Speech and Hearing Clinic and a remedial reading teacher in Unionville, Indiana's junior high and high schools; **Hazel Johnson,** who is working toward a master's degree in reading and certification as a reading specialist; **Brenda Kolker,** who has a master's from Penn State and is studing for an Ed. D. in elementary education at I.U.; **Leandra L. Scott,** who has been head of developmental reading programs at Anderson High School and at Ben Davis High School in Indianapolis; **Sharon L. Spall,** a core teacher for two years in Michigan City schools and now a graduate student working toward a master's in reading; and **Joe Turpin,** who received his M.S. in library science and special education and is beginning a Ph. D. in education while he abstracts at ERIC/CRIER.

The people who make the machines go round at ERIC/CRIER are an efficient crew. The administrative services staff includes: **Margaret S. Taylor,** the administrative secretary; **Rita K. Brown,** secretary and operator of the Flexowriter which will record all the document resumes and the abstracts taped for Central ERIC and the Clearinghouse; **Peggy A. Etchison,** secretary; and **Jane Greenwood,** clerk and keypunch operator.

ERIC/CRIER ADVISORY BOARD

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ADVISORY BOARD CHARTS DIRECTION. The stimulation of ideas, suggestions, and reactions to proposed objectives and procedures was the goal of the first ERIC/CRIER Advisory Board Conference held October 4-7 at Indiana University's Memorial Union. The meeting was a first step in the Clearinghouse's evolution from planning to operation. The Board serves as an important adjunct to ERIC/CRIER, linking the project with the professional group in reading and related areas.

Conference participants attended from New York, California, Minnesota, Michigan, Wisconsin, Delaware, Georgia, Florida, and Indiana. Those attending were: Wilmer Baatz, David K. Berninghausen, John R. Bormuth, N. Dale Bryant, Theodore Clymer, Myron L. Coulter, Brother Leonard Courtney, Douglas Ellson, Leo C. Fay, Albert J. Harris, Jack A. Holmes, James Hubbell, James Kerfoot, Albert J. Kingston, Alton L. Raygor, George Spache, Ralph Staiger, Edward G. Summers, Peter Hiatt, Ruth Gallant, Isabel Craig, and James Walden. The disciplines of reading, language arts, educational phychology, computer and information sciences, psychology, and library sciences were represented. Dr. Theodore Clymer and Dr. Edward G. Summers are co-chairmen of the advisory group.

Board members checked in on October 4 and quickly settled down to a detailed agenda. As a prelude to consideration and discussion of the many-faceted program, slides and tapes on the total ERIC program were presented. Explorations during the conference were built around five major topics:

- **Commissioning** "state of the art" monographs designed to bring together information sources and professional expertise on significant topics in reading.
- **Defining** tactics for aiding and conducting studies in reading necessitating access to the broad professional group in reading or comprehensive collections of documents.
- **Delineating** factors to be considered in establishing an effective acquisitions network and outlining criteria to insure quality control in acquiring documents.
- **Developing** indexing and vocabulary control procedures and organization of resources for producing the **Thesaurus of Reading Terms.**
- **Determining** user needs and developing services and information publications.

The final item on the agenda was a total group session to "question, discuss, explore, add ideas, and sum up."

All sessions for the conference were taped. The thirty-seven tapes indicate that ideas were developed, commented upon, and criticized. Policies and proposals were subjected to questioning. Some new approaches were recommended. Suggestions and proposals, based on the experiences of the participants, were submitted. Information was transmitted. In short, ERIC/CRIER received a large assist in planning and developing the initial efforts of the clearinghouse. A rather tired and momentarily speechless group of "explorers" concluded the conference with a social function sponsored by the Indiana University Foundation.

The ERIC/CRIER NEWSLETTER is currently being distributed, experimentally, without charge to approximately 4,000 leaders in reading. In addition, copies also go to individuals specifically requesting to be placed on the mailing list. The first few issues will provide information and background on the development of ERIC/CRIER.

The ERIC/CRIER NEWSLETTER is: Written by . . . Dr. Leo C. Fay, Dr. Edward G. Summers
Edited by . . . Mrs. Catherine F. Siffin

SPIN-OFF FROM THE DIRECTOR. The most important consideration in any information dissemination system is the **user.** In general, little is known about the needs of users with respect to information. Because of a scarcity of reliable data about user needs, the management of information facilities is sometimes confused and certainly less efficient than it could be. Information is often offered haphazardly and at times even forced on users. As ERIC/CRIER continues its growth and development, a constant question will be, "What services meet the needs of the user group?" A number of services are envisioned, but they will first be instituted on an experimental basis. Obtaining necessary feedback from users for the evaluation of services is of vital concern.

Flexibility is the key concept in bridging the gap between the corpus of collected material and the user group. It is also a key concept in information analysis in response to the demonstrated needs of the profession. As continued interface is obtained between the clearinghouse and the user group, viable services can be instituted and developed. The paradox in planning any information facility revolves around the need to organize information for use before adequate exposure to the user group can be obtained to properly influence the organization of material.

Different users will require different degrees of **completeness, relevance,** and **specificity** in the information provided. For example, the researcher may require rather complete coverage in terms of what is available in the initial stages of a project. However, relevance may not be as crucial at this point. Gradually, relevance and specificity become more important. The reverse is also true. On a given problem relevance and specificity of information may be highly important in the initial stages. Research in information processing has indicated that in most information systems there is a "trade-off" between completeness and relevance. An information service may respond with its entire file. Thus, completeness is high but relevance is minimal. In the event that one item is sent, relevance may be high but completeness minimal. A substantial relevance-completeness continuum exists. A researcher working on a given topic must establish, implicitly or explicitly, tolerances for relevance-completeness at various stages in his search for appropriate information. The characteristics of relevance-completeness vary inversely but not linearly.

Any information facility also has to consider varying degrees of relevance-completeness and communicate its capabilities along these lines to the user group. Relevance is an extremely important concept in planning indexing and describing documents for later retrieval through a coordinate indexing system. An index is something which points at or indicates. The capability of any information service is related to the effectiveness with which it can "point to" or "indicate" that certain documents are relevant to a specific request question. If high relevance and specificity of retrieval is required, indexing must be done in depth. Indexing must be done in depth not only in the number of terms used to describe the document but also in depth in terms of the intellectual content of the document. Less exacting standards of relevance will require less exacting performance in the indexing phase.

Although ERIC/CRIER is not attempting to pursue the unattainable goal of being all things to all people, it nevertheless envisions serving a broad group of users — including the practitioner in education as well as the researcher. Again, flexibility in developing the technical aspects of the clearinghouse and in instituting services and responding to user needs is the key concept.

E. G. S.

OUTPUT FORMS FOR ERIC. Add these two words to your vocabulary — **microfiche** and **hard copy** — if you will be ordering copies of documents in the ERIC collection. Microfiche and hard copy are the reproduction media chosen by ERIC for output. Both forms are available inexpensively and quickly.

"Microfiche" is a French word which describes a sheet of film containing microimages. The "microfiche" distributed by the ERIC Reproduction Service is a 4" x 6" sheet of microfilm which can contain up to 60-70 pages of a report or document. Each microfiche card consists of a **heading or title area** which includes an accession number, the title of the document, the source, the author, and other basic information which will assist the user; and the **microtext** which is made up of frames of microimages, each frame containing the equal of an 8½" x 11" page of material. The first frame of the microtext consists of the document abstract and its index terms and the succeeding frames are the text of the document. The microfiche is placed in a microfiche reader to enlarge a particular page image to original size. Microfiche readers are available at a reasonable cost from several firms in the microfilm services industry.

"Hard copy" is the name given to documents produced by Xerography. These paper copies are 70% reproductions of the original copy, will be 6" x 8" in size, and are bound in soft covers. Generally a sheet of microfiche which would contain fifty pages of documentation costs about nine cents, and hard copy, $2.00 for fifty pages.

The greatest impetus for the use of microfiche has come from the federal government. In 1963 the Council on Scientific and Technical Information (COSATI) of the Federal Council for Science and Technology established the format and specifications for all government microfiche. The standards established by COSATI have been generally adopted for microfiche reproduction. This standardization of format eliminated many of the ills of the old microfilm and other microforms and has made microfiche more readily acceptable by researchers. In 1965, the Defense Documentation Center (DDC) converted its film reproduction of research and development reports from microfilm to microfiche. Each month U. S. government agencies supply over one million microfiche copies of technical reports to interested scientists and researchers. Industrial firms are big consumers of the federal government's technical research. These firms also make use of microfiche within their organizations, principally for cataloging and dissemination of internal information. One large company indicated that maintenance men can carry around a thousand pages of instructions — plus a viewer — in a hip pocket.

Increasing technological changes and constantly expanding boundaries of knowledge create tremendous demands for information. Microfiche was not meant to replace books or save space in a library. Its economy and easy reproduction make it possible to put a world of reference material in a researcher's hands. Microfiche is also an excellent means of disseminating the large body of reports and ephemeral but important information which may never be published.

SCOPE NOTE FOR READING. Setting appropriate boundaries and delineating the scope and function of each of the ERIC centers to minimize overlap has been of major concern. Consultation with related professional groups, and work sessions with the ERIC staff and among the center directors, has resulted in a set of working definitions of the breadth and scope of operation for each clearinghouse. ERIC/CRIER's scope note states:

The Clearinghouse on Reading is responsible for acquiring research reports, materials, and information related to all aspects of reading behavior with emphasis on physiology, psychology, sociology, and the teaching of reading. Included are reports on the development and evaluation of instructional materials, curricula, tests and measurements, preparation of reading teachers and specialists, and methodology at all levels; the role of libraries and other agencies in fostering and guiding reading; and diagnostic and remedial services in school and clinic settings.

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ERIC CRIER

INFORMATION BRIEF

Number 2 January, 1967

A NEW SOURCE OF INFORMATION ON EDUCATIONAL RESEARCH

In November of 1966, a new publication was initiated by the U. S. Office of Education. **Research in Education** is a monthly catalog which provides up-to-date information about educational research sponsored by the Bureau of Research. The catalog is designed to keep teachers, administrators, research specialists, others in the educational community, and the general public informed about the latest significant findings from educational research.

One section of **Research in Education** lists **reports** of completed USOE projects. Descriptor terms and a resume of each report are included in addition to citation data. A sample report resume with explanatory notes of the various parts of the report entry is included on the back of this information sheet. Reports are indexed by author, institution, subject, USOE program, and contract and grant number. Reports cited are available in microfiche and hard copy at listed prices from the ERIC Document Reproduction Service. Complete information on ordering reports is included.

Research in Education also announces research **projects** as they are initiated by the Bureau of Research. Project documents are **not** available from the ERIC Document Reproduction Service. They are included in the catalog to keep the reader abreast of current as well as completed research. The sections on projects parallel those on reports: project resumes and indexes by investigator, institution, subject, program, and contract and grant number.

Subscriptions to **Research in Education** may be obtained by writing to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. Domestic subscriptions are $11.00 a year; $2.75 is added for foreign mailing. A check or money order made payable to the Superintendent of Documents should be included with your name, address, and ZIP code. Single copies of the abstract catalog are available at $1.00 each. **Research in Education** is published twelve times a year.

A listing of reports relating to reading from the November issue of **Research in Education** is included here for your information. Reports of completed and newly initiated projects in reading research will continue to appear in future issues. **Research in Education** promises to be a valuable tool for those interested in the area of reading.

ED 010 010 24

A Preliminary Evaluation of Nursery School Experience on the Later School Adjustment of Culturally Disadvantaged Children.
By — Goldstein, Kenneth M. Chorost, Sherwood B.
Staten Island Mental Health Soc. Wakoff Res. Ctr.
Report Number CRP-S-323 Pub Date 66
State Univ. of New York, Downstate Medical Center
EDRS Price MF — $0.09 HC — $1.36 34 P

ED 010 018 08

The Fate and Probable Future of High School Dropouts and The Identification of Potential High School Dropouts.
By — Gallington, Ralph O.
Southern Illinois Univ., Carbondale
Report Number BR-5-0700 Pub Date 1 Jan 66
Report Number SIU-21-13-2-49170
Grant OEG-5-85-005
EDRS Price MF — $0.09 HC — $2.12 53 P.

ED 010 030 24

Evaluation of Levels-Designed Visual-Auditory and Related Writing Methods of Reading Instruction in Grade One.
By — Manning, John C.
University of Minnesota, Minneapolis
Report Number CRP-2650 Pub Date 66
EDRS Price MF — $0.27 HC — $5.96 149 P.

ED 010 031 24

Effect of First-Grade Instruction Using Basal Readers, Modified Linguistic Materials, and Linguistic Readers.
By — Sheldon, William D. Lashinger, Donald R.
Syracuse Univ., New York
Report Number CRP-2683 Pub Date 66
EDRS Price MF — $0.18 HC — $3.92 98 P.

ED 010 032 24

A Comparative Study of Two First-Grade Language Arts Programs.
By — Kendrick, William M.
San Diego County Dept. of Education, Calif.
Report Number CRP-2576 Pub Date 66
State Dept. of Education, Sacramento, Calif.
EDRS Price MF — $0.18 HC — $3.04 76 P.

ED 010 034 24

A Linguistic Approach to the Teaching of English as a Foreign Language to Kindergarten Pupils Whose Primary Language is Spanish.
By — Brengleman, Frederick H. Manning, John C.
Fresno State Coll., Calif.
Report Number CRP-2821 Pub Date 66
University of Minnesota, Minneapolis
EDRS Price MF — $0.36 HC-$9.84 246 P.

ED 010 036 24

A Study of Depth of First-Grade Reading — An Analysis of the Interactions of Professed Methods, Teacher Implementation, and Child Background.
By — Chall, Jeanne S. Feldmann, Shirley C.
City Univ. of New York, City Coll.
Report Number CRP-2728 Pub Date 66
EDRS Price MF — $0.27 HC — $6.96 174 P.

ED 010 037 24

Comparison of Reading Approaches in First-Grade Teaching With Disadvantaged Children. (The Craft Project).
By — Harris, Albert J. Serwer, Blanche L.
City Univ. of New York Research Foundation
Report Number CRP-2677 Pub Date 66
City Univ. of New York, Div. of Teacher Education
EDRS Price MF — $0.27 HC — $6.04 151 P.

Edward G. Summers
Project Director
ERIC/CRIER

Sample Entry of Report Resume in Research in Education

Accession Number—an identification number sequentially assigned to reports as they are processed.

ED 010 037 24

Office of Education Program—a code for the legislative program which supported the research activity.

Title of the Research Report.

Comparison of Reading Approaches in First-Grade Teaching with Disadvantaged Children. (The Craft Project)

Author(s)—the individual(s) who prepared the report.

By — Harris, Albert J. Serwer, Blanche L.

Institutional Source—the organization at which the report was originated.

City Univ. of New York Research Foundation

Report Number CRP-2677 PUB DATE 66

Publication Date—the date the report was published.

City Univ. of New York, Div. of Teacher Education

Report Number—a number assigned by the report's originator.

EDRS Price MF — $0.27 HC — $6.04

151P.

EDRS Price—price of the document through the ERIC Document Reproduction Service. "MF" means microfiche; "HC" means hard copy.

Descriptors— *Beginning Reading, *Disadvantaged Youth, *Effective Teaching, *Reading Instruction, *Teaching Methods, Audiovisual Aids, Comparative Analysis, First Grade, Language Aids, New York, Phonology, Reading Processes, Skills, Urban Youth.

Descriptors—the subject terms assigned by an indexer to characterize the substantive contents of a report. Only the major terms, preceded by an asterisk, are printed in the index.

The relative effectiveness of the skills-centered approach and the language-experience approach to teaching reading to disadvantaged urban children in the first grade was examined, and methods compared. Approximately 50 teachers and 1,150 students made up the project sample. Types of data gathered included pretest and post-test scores of the pupils and instructional time logs, classroom observations, and preferred reading approaches from their teachers. Project results showed that the disadvantaged child can learn to read by the same methods that are used with middle and upper-class children. Among the four methods used, the Basal Reader Method, employed with the skills-centered approach, appeared to be the ideal approach. The other methods were the Basal Reader Method with phono-visual word recognition and two language-experience approaches with and without audio visual supplementation. Differences among the methods were sufficiently small as to be inconclusive. Continuation and replication studies were planned. (JH)

Informative Abstract—a condensation of the report in about 200 words. When applicable, it includes the purpose, procedure, results, and conclusions of the research activity.

Abstractor's initials.

ERIC/CRIER NEWSLETTER

VOLUME 1, NUMBER 2 APRIL, 1967

THE ERIC INFORMATION SYSTEM

There are really thirteen ERIC's—thirteen clearinghouses each of which functions in a specialized area of education with a specific area of responsibility; together they form an integrated information system. The aim of the ERIC system is to attack continuing information utilization problems and satisfy the information requirements of the educational community.

In the first issue of the *Newsletter* the establishment of ERIC/CRIER was described. As indicated in that issue, the Clearinghouse on Reading is one link in a nationwide information service designed for education. ERIC is a name that will become increasingly known in years to come. There are really thirteen ERIC's—each of the clearinghouses functions as part of an integrated information system. ERIC is an innovative concept bringing together under one umbrella a combination of unique units. The system includes business and industry through contracts with Bell and Howell and North American Aviation. The federal government is represented through the USOE activities. State and local, public and private education enterprises are included through acquisition activities and in utilizing services. Colleges and universities provide resources and serve as environments for clearinghouses. Finally, a broad array of professional groups, associations, and societies are represented through affiliation with clearinghouses or as sites for clearinghouses. Thus, a unique matrix of resources is being applied in a concerted, coordinated effort to attack continuing information utilization problems and satisfy the information requirements of the educational community.

Each of the thirteen clearinghouses operates within a specific area of responsibility. Current clearinghouses are a brief statement of their operational boundaries follow.

- *Library for Adult and Continuing Education*
  Mr. Roger DeCrow, Director
  Syracuse University
  107 Roney Lane
  Syracuse, New York 13210

  The clearinghouse is responsible for research documents on formal and informal adult and continuing education in all settings.

- *ERIC Clearinghouse on Counseling and Personnel Services*
  Dr. Garry Walz, Director
  University of Michigan
  Ann Arbor, Michigan 48104

  The clearinghouse is responsible for materials and research reports on the subject of educating, trying out, and supervising counselors and other personnel workers at all educational levels and in all settings.

- *ERIC Clearinghouse on the Disadvantaged*
  Dr. Edmund W. Gordon, Director
  Yeshiva University
  55 Fifth Avenue
  New York, New York 10003

  The clearinghouse is responsible for research reports and other documents on the educational, psychological, social, and general development of urban children and youth who are socially, economically, or culturally disadvantaged.

- *ERIC Clearinghouse on Educational Administration*
  Mrs. Ione F. Pierron, Director
  University of Oregon
  Eugene, Oregon 97403

  The clearinghouse is responsible for research reports dealing with the organization, leadership, and administration of educational programs and organizations, and with the preparation of educational administrators.

- *ERIC Clearinghouse on Exceptional Children*
  Dr. June B. Jordan, Director
  Council for Exceptional Children
  National Education Association
  1201 16th Street, N.W.
  Washington, D.C. 20036

  The clearinghouse is responsible for documents on educating children and youth who require special services—those who are gifted, mentally retarded, visually impaired, deaf, hard of hearing, physically handicapped, emotionally disturbed, or speech- and language-impaired.

- *ERIC Clearinghouse on Junior Colleges*
  Dr. Arthur M. Cohen, Director
  University of California at Los Angeles
  405 Hilgard Avenue
  Los Angeles, California 90024

  The clearinghouse is responsible for research documents about public and private community and junior colleges, including studies on students, staff, curricula, programs, libraries, and community services.

- *ERIC Clearinghouse on Linguistics and Uncommonly Taught Foreign Languages*
  Dr. A. Hood Roberts, Director
  Center for Applied Linguistics
  1755 Massachusetts Avenue, N.W.
  Washington, D.C. 20036

  The clearinghouse is responsible for research reports on linguistics and related language sciences and languages not commonly taught in the United States; that is, all except French, Italian, German, Spanish, Russian, Latin, and classical Greek.

- *ERIC Clearinghouse on Reading*
  Dr. Edward G. Summers, Director
  Indiana University
  200 Pine Hall
  Bloomington, Indiana 47401

  The clearinghouse is responsible for research reports on all aspects of reading behavior, with emphasis on the physiology, psychology, sociology, and teaching of reading.

- *ERIC Clearinghouse on Rural Education and Small Schools*
  Dr. Alfred Fotta, Director
  New Mexico State University
  University Park, New Mexico 88570

  The clearinghouse is responsible for research documents on organization, administration, curriculum, instruction, innovative programs, and other aspects of small schools and rural education in general.

- *ERIC Clearinghouse on School Personnel*
  Dr. Leonard J. West, Director
  City University of New York
  33 West 42nd Street
  New York, New York 10036

  The clearinghouse is responsible for research documents on school personnel at all levels, from preschool through university education, and encompassing all issues from selection to retirement.

- *ERIC Clearinghouse on Science Education*
  Dr. John S. Richardson, Director
  Ohio State University
  1314 Kinnear Road
  Columbus, Ohio 43212

  The clearinghouse is responsible for reports on all levels of science education, and on adult and continuing education in science.

- *ERIC Clearinghouse on the Teaching of Foreign Languages*
  Dr. Kenneth Mildenberger, Director
  Modern Language Association of America
  4 Washington Place
  New York, New York 10003

  The clearinghouse is responsible for research documents on teaching French, German, Italian, Russian, Spanish, Latin, and classical Greek.

- *ERIC Clearinghouse on Vocational and Technical Education*
  Dr. Robert E. Taylor, Director
  Ohio State University
  980 Kinnear Road
  Columbus, Ohio 43212

  The clearinghouse is responsible for research documents on the general field of vocational and technical education.

In addition to the above listed clearinghouses, arrangements have been made for Phi Delta Kappa's School Research Information Service (SRIS) to input materials it collects on research and innovative educational practices developed recently by local school systems and school study councils.

Additional ERIC clearinghouses will be established as time goes on. Proposals to establish clearinghouses in the areas of Educational Media and Technology, Basic Learning, Library and Information Sciences, English, Higher Education, The Arts, Educational Facilities, and Economics of Education are now being evaluated. The ERIC network will continue to grow and develop. It can provide a valuable service to education. All clearinghouses are now seeking documents in their specialized areas on research and research related activities. Inform your colleagues of clearinghouses in their areas of interest and encourage them to submit materials and become aware of available services. Write to any clearinghouse director to be placed on the mailing list.

FLEXOWRITER ARRIVES AT ERIC/CRIER

A Friden Model 2201 Flexowriter was delivered to the Clearinghouse during March. The Flexowriter is universally recognized as a basic input unit in data processing. The components include the typewriter, paper tape punch, and paper tape reader. A card punch is also available. The versatility of the 2201 is well known, and ERIC/CRIER plans on using it in two basic operations: (1) the automation of clerical procedures in processing "soft" copy, and (2) generation of computer readable input. The 2201 will operate automatically from coded paper tapes, edge punched cards, or tabulating cards. It can also be used to generate all three. The removable program control panel allows preprogramming for tasks of a repetitious or continuing nature. By changing panels, and by using canned program tapes, the operator can easily change machine applications.

All ERIC clearinghouses have been equipped with the 2201 as the basic input tool. A general overview of the procedure follows. Each clearinghouse selects the documents it wishes to input. Descriptive abstracts of the contents are prepared by the specialized subject staff of the clearinghouse following standard abstracting guidelines for all clearinghouses. Index terms are also assigned to each document using the preliminary ERIC Thesaurus and other indexing tools available to the particular clearinghouse. Needed specialized vocabulary not in the Thesaurus can be ascribed, but only with careful justification. An ERIC resumé form is prepared for each document. The necessary citation data is coded on the resumé form following guidelines established for descriptive cataloging for the ERIC system. A paper tape of the total resumé including index terms, citation data, and the abstract is then produced via the Flexowriter. The paper tape, a copy of the document, and other necessary information is then forwarded to North American Aviation by the clearinghouse. At NAA the input from the thirteen clearinghouses is checked and merged eventually by computer. The resumé form and all its information appears in the current awareness announcement published through ERIC. The document itself goes to Bell & Howell where it is prepared for microfiche or hard copy distribution. Of course many steps in the acquisition and screening of documents on reading occur prior to the development of Flexowriter input.

In March all clearinghouses prepared ten complete document "packages" for a trial run input to NAA. This enabled the clearinghouses to debug their procedures and equipment and also provided NAA with an opportunity to test and revise the total system with live input. After careful evaluation of all phases, necessary modifications were made. Document input continues on a trial run, scaled-down basis with something approaching a normal flow of documents anticipated by mid-summer.

ERIC/CRIER ACQUISITIONS NETWORK FORMED

In early 1967 over 4,000 professionals in reading throughout the nation were contacted and asked to serve in the acquisitions network. The ERIC/CRIER acquisitions philosophy was outlined and criteria for input of materials established. Some material has begun to trickle in, and the Clearinghouse is now tooled up to handle large amounts of input. Like other information collection and retrieval networks ERIC/CRIER is largely dependent on the professional group for materials to include in the system. If you have not yet sent in candidate materials please review Information Brief 1 or the first issue of the Newsletter for descriptions of the types of materials the Clearinghouse is seeking. Make a special effort to review your activities in reading and check with your colleagues for materials you feel are suitable for input. The material you send may be of value to others. Much that is submitted by others will undoubtedly be of value to you!

The ERIC/CRIER Advisory Board.

SPINOFF FROM THE DIRECTOR

The ERIC/CRIER Reading Review Series

Information analysis as well as information collection is a key concept in the activities of ERIC/CRIER. The development of specialized information centers is one solution to handling information problems. However, we can keep up with the explosion of information and the resulting increase in knowledge only if professionals in education are willing to commit themselves to the job of sifting, reviewing, and analyzing as well as merely identifying and collecting information. The use of information in its many forms is an integral part of research and development activities or any problem-solving endeavor. But it does have to be used with sophistication and reasoning as well as mechanically.

The specialized information center can serve as a retailer of information in reading by processing, disseminating, and interpreting information from wholesale depositories to the individual user. Thus, ERIC/CRIER acts as more than a library. It is staffed and guided by working researchers and practitioners in reading and related fields and maintains constant contact with the profession. In essence, ERIC/CRIER is a communication system in reading operated and controlled by the people it serves.

The activity of information analysis links the professionals in reading to an information base with the purpose of creating new interpretations of existing data—not just shuffling documents. Scholarly reviews, articles, and critical bibliographies become an important part of the output. The task of analyzing and synthesizing information in a given field is one worthy of the best minds and the broadest experience to recall, critically review, and illuminate large bodies of data. It involves the interface of the theorist with the recent products of a field on a given topic. This type of analysis is just as important to the profession as the discovery of experimental information. Reviewers dispassionately work with their materials giving equal attention to the contributions of others as well as their own. In the analysis process the reviewer searches for remaining problems and identifies the most fruitful areas of further work as well as emphasizing existing accomplishments. Needless to say, reviewers must be selected with care and their efforts come under intense scrutiny in th arena of academic scholarship.

The *Reading Review Series* is an ERIC/CRIER publication developed to provide monographs on timely topics. Authorities in reading are commissioned to systematically review a given topic and develop integrative, analytic manuscripts. They are provided with literature combing assistance and receive copies of important pertinent articles on their topic from the ERIC/CRIER files. Their task is to review, analyze, and synthesize with particular emphasis on past accomplishment and new lines of necessary research and development.

Reviews of various types can be done and a continuum of literature analysis exists involving different degrees of professional competency in the analysis of differing levels of document surrogation ranging from citations to complete articles. At one extreme is a mere list of citations of articles related to a broad topic pulled together by a research assistant. This is largely a clerical-identification function. At the other extreme is the comprehensive review and synthesis of a given body of documents by an extremely capable professional worker in the field who brings into play the skills necessary for intellectual analysis and processing of a high order. The annotated bibliography, the indexing of articles, and the production of indicative or evaluative abstracts are examples of analysis activities falling at other points along the review continuum.

ERIC/CRIER will engage in information analysis throughout the total continuum just described. Four monographs at the level of sophisticated analysis and processing are underway for the first contract period. These are in process, and it is hoped that some will be available as early as fall of 1967. Monographs have been commissioned in the areas of diagnosis and treatment of reading disabilities, secondary reading, study skills, and research trends in reading. These topics are being developed by Ruth Strang, A. Sterl Artley, Alton Raygor, and Theordore Clymer. Within a short time announcement will be made of the availability of approximately twenty bibliographies on various topics of current interest in reading. As our abstracting and indexing procedures are applied to a growing body of acquisitions, other types of reviews will be produced and made available. Watch for announcements of the sale of ERIC/CRIER review publications in future issues of the *Newsletter*.

E.G.S.

MORE FROM RESEARCH IN EDUCATION

ERIC/CRIER's *Information Brief 2* introduced readers to *Research in Education*, the new monthly catalog of the U.S. Office of Education which gives up-to-date information about educational research sponsored by the Bureau of Research. The catalog, first issued in November, 1966, includes resumés and indexes of completed research reports and also announces research projects as they are initiated by the Bureau of Research. Subscriptions to *Research in Education* may be ordered from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 for $11.00 per year domestic mailing, and $13.75, foreign mailing. Single copies are available for $1.00.

A listing of completed reports and recently initiated projects relating to reading which are catalogued in the first three issues (November, 1966; December, 1966; and January, 1967) of *Research in Education* is included here for your information. Microfiche (MF) and hard copy (HC) reproductions of reports are available by accession number (ED _____) at listed prices from the ERIC Document Reproduction Service, Bell and Howell Co., 1700 Shaw Avenue, Cleveland, Ohio 44112. Note that copies of research projects are not available but are listed here to keep you informed of on-going research.

Completed Reports

ED 010 010

A Preliminary Evaluation of Nursery School Experience on the Later School Adjustment of Culturally Disadvantaged Children.
By—Goldstein, Kenneth M. Chorost, Sherwood B.
Staten Island Mental Health Soc. Wakoff Res. Ctr.
Report Number CRP-S-329 Pub. Date: 66
State Univ. of New York, Downstate Medical Center
EDRS Price MF—$0.50 HC—$1.16, 34 P.

ED 010 018

The Fate and Probable Future of High School Dropouts and The Identification of Potential High School Dropouts.
By—Gallington, Ralph O.
Southern Illinois Univ., Carbondale
Report Number BR-5-0758 Pub Date: 1 Jan 66
Report Number SIU-21-13-2-48178
Grant OEG-5-85-008
EDRS Price MF—$0.50 HC—$2.12, 53 P.

ED 010 030

Evaluation of Levels-Designed Visual-Auditory and Related Writing Methods of Reading Instruction in Grade One.
By—Manning, John C.
University of Minnesota, Minneapolis
Report Number CRP-2859 Pub. Date: 66
EDRS Price MF—$0.27 HC—$5.96, 149 P.

ED 010 031

Effect of First-Grade Instruction Using Basal Readers, Modified Linguistic Materials, and Linguistic Readers.
By—Sheldon, William D. Lashinger, Donald R.
Syracuse Univ., New York
Report Number CRP-2552 Pub Date: 66
EDRS Price MF—$0.18 HC—$3.92, 98 P.

ED 010 032

A Comparative Study of Two First-Grade Language Arts Programs.

By—Kendrick, William M.
San Diego County Dept. of Education, Calif.
Report Number CRP-2576 Pub Date: 66
State Dept. of Education, Sacramento, Calif.
EDRS Price MF—$0.18 HC—$3.04, 76 P.

ED 010 034

A Linguistic Approach to the Teaching of English as a Foreign Language to Kindergarten Pupils Whose Primary Language is Spanish

By—Brengleman, Frederick H. Manning, John C.
Fresno State Coll., Calif.
Report Number CRP-2821 Pub Date: 66
University of Minnesota, Minneapolis
EDRS Price MF—$0.36 HC—$9.84, 246 P.

ED 010 036

A Study of Depth of First-Grade Reading—An Analysis of the Interactions of Professed Methods, Teacher Implementation, and Child Background

By—Chall, Jeanne S. Feldmann, Shirley C.
City Univ. of New York, City Coll.
Report Number CRP-2728 Pub Date: 66
EDRS Price MF—$0.27 HC—$6.96, 174 P.

ED 010 037

Comparison of Reading Approaches in First-Grade Teaching With Disadvantaged Children. (The Craft Project).

By—Harris, Albert J. Serwer, Blanche L.
City Univ. of New York Research Foundation
Report Number CRP-2677 Pub Date: 66
City Univ. of New York, Div. of Teacher Education
EDRS Price MF—$0.27 HC—$6.04, 151 P.

ED 010 048

A Study of the Effects of Intensive Oral-Aural English Language Instruction, Oral-Aural Spanish Language Instruction and Non-Oral-Aural Instruction on Reading Readiness in Grade One.

By—Horn, Thomas D.
University of Texas, Austin
Report Number CRP-2548 Pub Date: 66
EDRS Price MF—$0.18 HC—$4.60, 115 P.

ED 010 049

A Comparative Study of Two Approaches to the Teaching of Reading in the National Language.

By—Modiano, Nancy
New York Univ., School of Education
Report Number CRP-S-237 Pub Date: 66
EDRS Price MF—$0.27 HC—$7.08, 177 P.

ED 010 050

Word Associations and Learning to Read.

By—Samuels, S. Jay
University of California, Los Angeles Campus
Report Number CRP-S-278 Pub Date: 66
EDRS Price MF—$0.09 HC—$1.44, 36 P.

ED 010 051

Comparison of Reading Achievement of First-Grade Children Taught by A Linguistic Approach and a Basal Reader Approach.

By—Schneyer, J. Wesley and Others
University of Pennsylvania, Philadelphia
Report Number CRP-2606 Pub Date: 66
EDRS Price MF—$0.27 HC—$6.76, 169 P.

ED 010 058

The Effectiveness of Teaching Reading in Kindergarten.

By—McKee, Paul Brzeinski, Joseph
State Dept. of Education, Denver, Colo.
Report Number BR-5-0371 Pub Date: 66
Denver Public Schools
EDRS Price MF—$0.27 HC—$5.84, 146 P.

ED 010 060

Instruction of High School Students in Reading for Different Purposes.

By—Smith, Helen K. Andresen, Oliver S.
University of Chicago
Report Number CRP-1714
EDRS Price MF—$0.63 HC—$17.84, 446 P.

ED 010 062

An Evaluation of Three Approaches to Teaching Reading in First Grade.

By—Bordeaux, Elizabeth A.
Goldsboro City Schools, N.C.
Report Number CRP-2719
State Board of Educ., Dept of Pub. Inst., Raleigh, N.C.
EDRS Price MF—$0.18 HC—$2.80, 70 P.

Projects in Progress

EP 010 061

A Workshop in Reading Research.
Investigator—Rothrock, Dayton G.
McPherson College, Kans.
Bureau Number BR-6-8483 Proposal Date: 22 Jan 66
Grant OEG-3-6-068483-1213
Start Date 06-03-66 End Date 01-31-67

EP 010 074

Education Research Training Program
Investigator—Leedy, Paul
Amer. Univ., Washington D.C.
Bureau Number BR-6-2779 Proposal Date: 20 Apr 66
Grant OEG-1-6-062779-1758
Start Date 06-10-66 End Date 08-31-67

EP 010 217

The Influence of Vision Training upon the Subsequent Reading Achievement of Fourth Grade Children.
Investigator—Huelsman, Charles B.
Ohio State Univ., Columbus
Bureau Number BR-5-0814 Proposal Date: 62
Contract OEC-3-10-069
Start Date 01-24-63 End Date 01-23-68

EP 010 221

The Effect of Subvocal Speech on Reading
Investigator—Hardyck, Curtis D.
Univ. of Calif. Berkeley Comp. Inst. of Human Learn.
Bureau Number BR-5-1126 Proposal Date: 3 Aug. 65
Contract OEC-6-10-275
Start Date 03-21-66 End Date 03-20-70

EP 010 234

A Voluntary Prekindergarten Language Development and Reading Program for the Entire Four-Year-Old Population of a City.
Investigator—Martin, John H.
Mount Vernon Public Schools, N.Y.
Bureau Number BR-6-1383 Proposal Date: 18 Jan 65
Grant OEG-1-6-061383-2096
Start Date 06-30-66 End Date 06-29-69

EP 010 239

A Thai Cultural Reader for American Students (Intermediate Level)
Investigator—Jones, Robert B., Jr.
Cornell Univ., Ithaca, N.Y.
Bureau Number BR-6-2119 Proposal Date: 66
Contract OEC-1-7-062119-2073
Start Date 11-01-66 End Date 04-30-68

EP 010 276

Value Implications in Children's Reading Material.
Investigator—Osmon, Howard A.
Univ. of Virginia, Sch. of Educ., Charlottesville
Bureau Number BR-6-8378 Proposal Date: 66
Grant OEG-2-6-068378-0209
Start Date 09-01-66 End Date 09-01-67

EP 010 296
The Analysis of Cognitive Growth of Children (Grades 2-6) as Shown in Their Oral Discussion and Written Compositions.
Investigator—Sebesta, Sam
University of Nebraska, Lincoln — Proposal Date: 28 Mar 66
Contract OEC-3-7-068713-0227
Start Date 09-15-66 — End Date 07-14-67

DON'T LET THIS ONE GET AWAY

What is a microfiche? (Fiche from the French; pronounced "fish.") Do you put it in water? Fry it in a pan? You'll get a soggy mess if you try to float it and an indigestible dish if you cook it. The thing to do with a microfiche is put it in a MICROFICHE READER! A microfiche is a sheet of film containing microimages. It is one of the two reproduction media chosen by ERIC for output of its documents. A single 4" x 6" ERIC microfiche contains as many as 60-70 pages of a report and costs just nine cents. Placed in a microfiche reader which enlarges page images to their original size, the microfiche puts a wealth of research and information in the hands of the practitioner or researcher.

Microfiche copies of ERIC documents, which will be cataloged in *Research in Education*,* may be ordered from the ERIC Reproduction Service, Micro Photo Division, Bell & Howell Co., 1700 Shaw Avenue, Cleveland, Ohio 44112. "Hard copy" prints which are reproductions at 70% of original size, 6" x 8", and bound in soft covers will also be available at four cents per page—thus a sixty page document in hard copy would cost $2.40 as compared to nine cents for a microfiche with the same document content.

Easy access to reference materials at low cost makes microfiche an ideal medium for ERIC documents. As microfiche can be used only by those who have access to microfiche readers, ERIC documents users will undoubtedly be interested in acquiring microfiche readers for themselves, their research units, or their libraries. There is a growing number of microfiche readers on the market at a wide range of prices, with an equally wide range of features. A simple pocket-sized reader sells for $3.00; other desk and table models range in price from $100. to $450+. Some institutions may find use for a microfiche reader-printer which markets for around $1500. A reader-printer makes copies of page images in a matter of seconds.

Listed below are names and addresses of manufacturers of microfiche readers and reader-printers to whom interested persons may write for specific information on models and prices. *Newsletter* readers are also referred to an excellent report—"The Selection of a Microfiche Reader" in the American Library Association's *Library Technology Programs*, "Microforms and Equipments" Section. The *ALA Programs* are generally available in college, university, and state libraries.

The ALA report suggests consideration of these questions in selecting a microfiche reader:

1. Will the reader accommodate a 4" x 6" microfiche? This is the size of the ERIC microfiche and the size adopted by the federal government for technical reports. (All of the manufacturers listed below make a reader which meets this requirement.)

2. Is the reduction ratio of the microfiche compatible with the magnification ratio of the reader? For example, the federal government standard specification on reduction ratio is 1:18. Therefore if the reader magnifies 18×, the document will be brought back to original size. Magnification need not always equal reduction, but it must be great enough to make reading easy.

3. Is the size of the screen adequate? The page size of technical reports is usually 8½" x 11". Pages of books, articles, and other reports may be smaller or larger. Type sizes also vary. The important consideration is legibility of the screen image and ability to fit a line width on the screen.

4. Can the image on the reader be rotated at least 90 degrees? This makes it possible to read charts, tables, or other figures which frequently appear vertically on a page.

5. Is the screen image sharp and clear from edge to edge; and is screen brightness uniformly at a level which will provide comfortable viewing in ordinary room illumination?

Manufacturers of Microfiche Readers and Reader-Printers

Manufacturer	*Reader*	*Reader-Printer*
Atlantic Microfilm Corp. 700 South Main St. Spring Valley, New York 10977	x	
Bell & Howell Co. 6800 McCormick Road Chicago, Illinois 60645	x	
Data Reproduction Systems 300 E. Beach Ave. Inglewood, California 90302	x	
Eugene Dietzgen Co. Griscombe Products Div. New Brunswick, N.J. 08901	x	
Documat Inc. 84 Fourth Ave. Waltham, Mass. 02154	x	x
Documentation, Inc. Bethesda, Maryland 20014	x	x
DuKane Corp. St. Charles, Illinois 60174	x	
Eastman Kodak Co. 343 State St. Rochester, New York 14608	x	
Erban Products, Inc. 134-20 Northern Boulevard Flushing, New York 11354	x	
General Analine & Film Corp. 140 W. 51 St. New York, New York 10010	x	x
Griscombe Products Co. 133 W. 21 St. New York, New York 10011 (Griscombe readers are also sold by Recordak, Remington Rand, and Dietzgen.)	x	
IBM Corp. P. O. Box 10 Princeton, New Jersey 08540	x	x
Itek Business Products 1301 Jefferson Road Rochester, New York 14623		x
Microcard Corp. 365 S. Oak St. West Salem, Wisconsin 54669	x	
Microreader Mfg. Corp. 2217 N. Summit Ave. Milwaukee, Wisconsin 53202	x	x

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* See page 3, "More from *Research in Education*" for information on this new catalog.

Manufacturer	*Reader*	*Reader-Printer*
3M Company 2501 Hudson Road St. Paul, Minnesota 55119		x
National Reproductions Corp. 429 E. Jefferson Detroit, Michigan 48226	x	
Readex Microprint Co. 5 Union Square New York, New York 10003	x	
Recordak Corp. 770 Broadway New York, New York 10003	x	x
Remington Rand Office Systems 122 E. 42 St. New York, New York 10017	x	x
University Microfilms, Inc. 313 N. First St. Ann Arbor, Michigan 48103	x	
Xerox Corp. Rochester, New York 14601	x	

The pocket-sized microfiche reader mentioned in this article is sold by the Taylor-Merchant Corporation, 25 W. 45 Street, New York, New York.

The importance of microfiche as a tool of modern educational technology has become clear. More researchers and practitioners will increasingly recognize it as an easy means of access to the expanding body of educational research and information. One measure of the acceptance of new ideas in our culture and subcultures is the emergence of jokes and legends. And only yesterday the following sign was seen on the door of an ERIC microfiche user: "Gone fishing!"

Happy shopping!

INTERESTED IN CURRENT INFORMATION ON PROJECTS IN READING AND INGLISH?

Many programs, projects, and activities designed to evaluate or improve the teaching of reading and English in schools and colleges are being initiated almost on an hourly basis in every state. The Center for Applied Linguistics has developed the *Inventory of Projects and Activities in Reading and English* to supply information on current projects and ativities in reading and English. The *Inventory* is organized on a sate by state basis and includes information on:

- action programs seeking to exploit advances in linguistic science and related fields
- projects and activities seeking to explon ways of handling the special language problems of speakers of non-standard varieties of English
- school based comparative experiments
- studies of Language Arts and English curricula with a view to modification or revision
- projects to prepare new teaching materials and/or tests
- projects to exploit audio-visual aids
- scholarly research directly related to av of the above

For more information on the *Inventory* write t:

Inventory of Projects and Activities in Reading and English
Center for Applied Linguistics
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

ERIC/CRIER ADVISORY BOARD

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ERIC/CRIER is a joint project of the International Reading Association and Indiana University in cooperation with the USOE.

ERIC/CRIER NEWSLETTER

The ERIC/CRIER Newsletter is a publication of the ERIC/Clearinghouse on the Retrieval of Information and Evaluation on Reading and is currently being distributed, experimentally, without charge to approximately 4,000 leaders inreading. In addition copies also go to individuals specifically repesting to be placed on the mailing list. Persons who would liketo be added to the mailing list should send their name, address, and Zip Code to ERIC/CRIER, 200 Pine Hall, School of Education, Indiana University, Bloomington, Indiana 47401. The fist few issues of the Newsletter will provide information and background on the development of ERIC/CRIER. The Newsletter is designed to collect information; inform users of current activitie, services, projects, recent accessions; and act as a communicaions medium for the Clearinghouse.

THE ERIC/CRIER NEWSLETTER is: Written by ..... *Dr. Lo C. Fay*, *Dr. Elward G. Summers*
Edited by ..... *Mrs. Catherine F. Sittin*

ERIC CRIER NEWSLETTER

VOLUME 1, NUMBER 3 JUNE, 1967

RETROSPECT AND PROSPECT—ERIC/CRIER TAKES STOCK

As of June 1, 1967, the Clearinghouse on Reading has been funded for a total of one year. It seems desirable at this point to engage in a backward glance at what has been accomplished and a forward glance at what lies ahead—retrospect and prospect—for ERIC/CRIER. ERIC was established by the USOE to provide better access to current research and research-related information in education. Thirteen clearinghouses, and Central ERIC, are now working together to identify, collect, process, disseminate, and analyze information in education. Additional clearinghouses will be established in other subject areas in 1967-68. ERIC/CRIER was organized to provide an information retrieval facility in reading and to contribute to the larger task of organizing and making information available in the broad field of education. No viable information facility could exist without close support from the related professional groups. ERIC/CRIER is a joint project between the International Reading Association and Indiana University in cooperation with the USOE. An Advisory Board consisting of individuals from reading and related disciplines, and the important areas of library and information science and computer technology, provides direction and aids in the development of the Clearinghouse. Close liasion is maintained with the professional group in IRA through members of the board and direct contact with the Executive Secretary.

Reading Scope Note

It is necessary to define the subject area within which one is working as accurately as possible before collecting documents and information. The ERIC/CRIER staff and advisory group developed a scope note for reading in an early meeting. The scope note states as precisely as possible the subject boundaries within which the Clearinghouse will operate. ERIC units have attempted to state their boundaries to avoid overlap in acquisitions and duplication of services. Some overlap is unavoidable as education cuts across many domains, and it is not always possible to precisely describe areas of activity within the field. Some of the problems for the future are to determine the areas in which new clearinghouses are needed, the coordination of new units with the existing system, and the optimal size of the total system.

Acquisitions

The ultimate goal in establishing a retrieval service is to provide as complete coverage of information as possible. An acquisitions philosophy and an acquisitions network consisting of professionals in all areas of reading have been developed for ERIC/CRIER. The Clearinghouse has also developed an *Inventory of Information Sources in Reading* to systematize the collection of potentially useful materials. Although requests for materials have been conducted in a somewhat shotgun fashion thus far, we anticipate requesting specific materials from specific groups and individuals as acquisition procedures are tailored more to the *Inventory*. In addition to working with its own network of professionals in reading, ERIC/CRIER is also involved in the program being carried on by Central ERIC to acquire potentially useful materials for the system as a whole. Centralized acquisition of material wherever possible avoids duplication and the resultant confusion when an information source is solicited by more than one clearinghouse. Central ERIC staff and the clearinghouse directors are hard at work on plans to develop central acquisition of materials from U.S.O.E., state departments of education, federal agencies, larger public school systems, and acquisition of dissertations in education. The material collected centrally will be routed to the appropriate clearinghouse for evaluation and processing. The agencies listed above represent major sources of fugitive materials—those which probably never appear in printed form. Plans are also well advanced to develop a system to insure that the published journal literature in education is systematically covered and announced in the ERIC system. Thus, through cooperative activities carried on through Central ERIC and the separate clearinghouses, a combined attack is underway to systematically blanket and include all possible information sources in education.

Indexing and Vocabulary Control

In analyzing information and providing services it is seldom economical for a retrieval system to work consistently with the full text of a document. Some means must be developed to describe the document efficiently—some shorthand technique which enables the system to sort documents economically in response to differing needs. Various alternatives are possible. ERIC uses an informative abstract and a series of twelve to fifteen carefully selected terms to describe the documents in the system. Taken together the terms permit the indexer to describe the document for later retrieval through a coordinate indexing system. Each descriptor describes an important concept in the document.

The terms are selected from the *Thesaurus of ERIC Descriptors* which provides the terms and indicates the hierarchical relationships among them. The thesaurus was built using documents collected in the area of the culturally disadvantaged. As each clearinghouse indexes documents, it has the option of adding needed terminology to represent the ideas and concepts in its special subject area. Addition of new terms has to be carefully controlled or the thesaurus could balloon to monstrous proportions. Each new term is carefully justified as to definition and utility. Building a thesaurus is a complex and exacting task, and some obvious compromises have to be made. In essence one is asking the question, "What terms out of the several hundred thousand available in the English language have the most utility in describing the concepts and ideas in the varied domains of the field of education?" It is to our advantage that the ERIC system allows the subject matter specialists in education to determine the terminology to be used. Thus far, thesaural development has been carried on largely through the indexing done by Central ERIC. The indexing being done by clearinghouses is beginning to appear, however, and as more documents are included from the clearinghouses their terminology will be added. The development of educational terminology is an evolutionary process—one which Central ERIC and the clearinghouses will jointly pursue for some time to come. The end result could be the first definitive compilation of terminology in education.

Dissemination

In disseminating information in the ERIC system various alternatives exist. The output could include bibliographies of citations, citations with abstracts, or citations with abstracts and index terms. These could be tailor-made on a demand basis or produced as need arises and cover broad topics of general interest. Unique state of the art papers, reviews, and summaries could also be initiated. Various announcement bulletins are possible. Information could just be announced or complete copy made available in microfiche, hard copy, or microfiche and hard copy. Finally, the information could be announced and made available through one central source or a local source depending on whether it is produced by Central ERIC or ERIC/CRIER. Various combinations of the above possibilities are now being produced or contemplated. *Research in Education* is being produced by Central ERIC and will soon include input from the clearinghouses. RIE is the major access point for information across the broad field of education. It is also the major source for information about documents which are available in microfiche and hard copy form. The separate clearinghouses will develop local materials for dissemination in addition to contributing to RIE. The output for ERIC/CRIER will relate largely to our activities in information analysis in reading as described in *Newsletter* 2, April. Three recent reviews have been completed using ERIC/CRIER resources. Four state of the art papers are now in various stages of completion, and another series will be started during the second contract period. By fall of 1967 a series of bibliographies, containing citations and abstracts and organized around broad topics in reading, will be available. The first of these will be out in mid-summer and is described elsewhere in this issue. A major task force has been organized to work with publishers on the automation of information on instructional resources in reading. Announcements relative to this project will be forthcoming soon. Work is rapidly proceeding to provide a program for some searching of the research literature in response to specific questions posed by the serious researcher. An approach using electronic data processing equipment to handle the material and produce the printout is envisioned. New projects will be initiated as need for them arises. Meanwhile, the work of adding to the base of information already collected and analyzing and processing documents continues. The *ERIC/CRIER Newsletter* will continue to be used as a source of information on developments within ERIC and ERIC/CRIER and will most likely be issued more frequently and expanded in size during the next contract period.

Prospect

The ERIC system has made progress in one short year. As recently as two years ago it would have been highly unlikely that a substantial body of people representing education, library and information science, computer technology, professional associations, colleges and universities, private industries, federal and state governments, and local school systems could have been found discussing the problems of designing and implementing an information system for education. The system is off the ground and operating. Design and implementation will continue as new problems are met, but the prospect of developing a highly useful information system for education looks extremely good.

ERIC/CRIER OUTPUT

The first two reviews utilizing the research resources of ERIC/CRIER were written in January and published in late April. "Reading in the Elementary School" and "Reading in the Secondary School" appeared as chapters in the AERA *Review of Educational Research—Language Arts and Fine Arts*. The two reviews cover the period 1963 to 1966. The reviews organize and analyze selected research literature in reading for the three-year period and are critical and interpretive rather than encyclopedic. Literature combing was conducted by the Clearinghouse and over 200 articles from the ERIC/CRIER collection were provided the authors for their use in writing the reviews. To secure a copy of the reviews ask for: *The Review of Educational Research—Language Arts and Fine Arts*. Vol. XXXVII. April, 1967. The cost is $3.00 for the complete issue. Order from: American Educational Research Association, 1201 Sixteenth St. N.W., Washington, D.C. 20036.

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In July of 1967 the first product in the *ERIC/CRIER Reading Review Series* will be available from the Clearinghouse. "Recent Reviews and Bibliographic Resources for Reading Research" lists over 200 items from the research for the past ten years which can be of aid in the initial combing of the literature for sources of information in any research project. Included are bibliographies, reviews, and analyses done on various topics in reading. A complete informative abstract accompanies each citation. Dr. James L. Laffey, Associate Director of ERIC/CRIER, compiled the listing. To receive a copy send a postcard to ERIC/CRIER, 200 Pine Hall, Indiana University, Bloomington, Indiana 47401, with your complete return address and zip code. On the postcard write "Send one copy of the *ERIC/CRIER Reading Review Series, Bibliography 1*."

SPINOFF FROM THE DIRECTOR

Can we cope with the DYBOSPHERE?

In a fascinating book, *Man's Place in the Dybosphere*, Richard R. Landers[4] examines what is going on and what is likely to happen in the age of the self-sustaining, self-regulating, self-repairing, and even self-reproducing machine. The word *dybosphere* originates in Hebrew mythology and folklore where a creature doomed to wander (an unassigned soul) is termed a *dybbuk*. The biosphere—the realm of living things and living actions—needs little explanation to most of us. However, the age of artificially created things which behave in a lifelike manner—the dybosphere—is new and emerging. The puzzle of the living and the created—the animate and the inanimate—and the relation between the two has deep roots. Aristotle in his *Physics* makes this distinction, "Of things that exist, some exist by nature, some from other causes." Man has succeeded in adapting himself to the environment and now is rapidly adapting the environment to his needs. The animate is beginning to fully capitalize on the inanimate. As man becomes mechanized, machines become more humanized. Landers posits that this trend is resulting in the convergence of a biogenic machine (a mechanized man) and a dybogenic man (a humanized machine). Lander's book is not a polemic against the computer age. The basic thesis is that man has created a host of machines, now machines could create a new kind of man if man can adjust to the *dybosphere*.

Man-machine relations are of major concern today and man-machine systems are rapidly proliferating. The man-machine interface creates problems. For example, in a retrieval center, the question is not an either/or between machine or human abstracting and indexing. The potential seems to lie in machine-aided human abstracting and indexing. Concern extends beyond just the optimal economic operation of man-machine systems. The familiar *Human Use of Human Beings* by Wiener[10] relates cybernetics, the scientific study of methods of control and communication common to living organisms and machines, to the larger inherent philosophical questions. In *Automation, Education and Human Values*, Brickman and Lehrer[1] organize papers which question the human implications for education of the pervasive impact of exponentially accelerating technological change—specifically through the marriage of sophisticated producing and processing machinery with the computer itself developing advanced sophistication with astonishing speed and ingenuity.

One product of the *dybosphere*, the age of doing things faster and in greater quantity, is the increased flood of information resulting from the swift forward movement of scientific intellect. In *Intrex: The Report of a Planning Conference on Information Transfer Experiments*,[7] it is pointed out that the 20th Century has already seen profound change and the rate of change will increase rather than decrease. One of the most conspicuous changes has been the extent to which recorded information has become a critical need in all aspects of modern life. The rate of increase is phenomenal. The post WW II expansion of scientific literature heralded the beginning of the information explosion. Rider[9] threw a bombshell into the library world by his demonstration of the exponential growth of research library collections. He found that these had been doubling in size, on the average, every sixteen years. Two decades later such exponential growth is a firm reality. Book publishing alone increases by ten per cent every year. Seventy to seventy-five thousand scholarly journals are now available to the academic community. Book and periodical collections continue to grow, and the increase in the elusive report literature is staggering.

Activity and speculation continue on the best method of coping with the information explosion. Over 400 special information services can be identified ranging from the massive Defense Documentation Center to the small, specialized subject clearinghouse. The federal government is particularly concerned with problems of information handling. *Science, Government, and Information*,[8] sometimes called the Weinberg report, presents the recommendations of the President's Science Advisory Committee on the responsibilities of the technical community and the government in the transfer of information. The major goals of information services are the collection, organization, efficient storage, retrieval, dissemination, and at times analysis of information. The field of information science is expanding at a marked rate. A twelve volume work is now in preparation which pulls together the major developments in the information sciences cutting across disciplines. This *Encyclopedia of Library and Information Science*[3] will include over 1,000 topics and has enlisted an International Advisory Board to aid in its development. In any field ready access to pertinent information is crucial in solving problems. This is particularly true in education as a wide array of problems are identified and attacked in the programs mounted to improve the quantity and quality of education for all. ERIC was created for just this purpose.

Can we cope with the information explosion? The tools are at hand and require only the intelligent application of the animate to the inanimate. The question is only a small part of the larger issue posed in our age, "Can we cope with the *dybosphere*?" Landers suggests that man's place in the *dybosphere* need not be frightening and could be good. *Dybology* no doubt will become an increasingly necessary study in our cyberculture.

E.G.S.

1. Brickman, W. W., & Lehrer, S. (Eds.) *Automation, education and human values*. New York: School and Society Books, 1966.
2. Greenberger, M. (Ed.) *Computers and the world of the future*. Cambridge, Mass.: M.I.T. Press, 1962.
3. Kent, A., & Lancour, H. (Eds.) *Encyclopedia of library and information science*. New York: Marcel Dekker, 1967.
4. Landers, R. R. *Man's place in the dybosphere*. Englewood Cliffs, N.J.: Prentice Hall, 1966.
5. National Referral Center for Science and Technology. *A directory of information resources in the United States. Physical sciences, biological sciences, engineering*. Washington, D.C.: Government Printing Office, January, 1965.
6. National Referral Center for Science and Technology. *A directory of information resources in the United States. Social sciences*. Washington, D.C.: Government Printing Office, October, 1965.
7. Overhage, C. F. J., & Harman, R. Joyce (Eds.) *Intrex: report of a planning conference on information transfer experiments*. Cambridge, Mass.: M.I.T. Press, 1965.
8. President's Science Advisory Committee. *Science, government, and information*. Washington, D.C.: Government Printing Office, 1963.
9. Rider, F. *The scholar and the future of the research library*. New York: Hadham Press, 1944. As cited by V. W. Clapp, *The future of the research library*. Urbana: University of Illinois Press, 1964, p. 1.
10. Wiener, N. *The human use of human beings*. Garden City, New York: Doubleday, 1954.
11. Yale University. *Computers for the humanities?* New Haven: Author, 1965.

MORE FROM RESEARCH IN EDUCATION

Twenty-one additional completed research *reports* and eleven recently initiated *projects* in reading are indexed in the February, March, and April issues of *Research in Education,* the new monthly catalog of the U. S. Office of Education which gives up-to-date information about educational research sponsored by the Bureau of Research. In early summer, documents submitted to Central ERIC by the ERIC clearinghouses will begin to appear in *Research in Education.* These clearinghouse documents will be part of the ERIC collection and will be included each month in the catalog.

For your information, a listing of the completed **reports** related to reading from the February, March, and April issues of *Research in Education* is given below. Note that this listing indicates only the descriptive cataloging information for each report. *Research in Education* also includes with each entry a group of "descriptors" or index terms to characterize the substative content of the report and an informative abstract of about 200 words. Reports are also indexed in these five ways: author or investigator, institution responsible for the research, subject area of the research, legislative program authorizing the research, and contract and grant number. Subscriptions to *Research in Education* may be ordered from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402 for $11.00 per year, domestic mailing, and $13.75, foreign mailing. Single copies are available for $1.00.

Completed Reports

ED 010 171
First-Grade Reading Instruction.
By—Robinson, R. E.
Asheville City Schools, N. C.
Report Number CRP-2874 Pub Date: 66
Report Number BR-5-0554
EDRS Price MF-$0.09 HC-$1.88 47P.

ED 010 191
Relations Between Teacher Practice and Knowledge of Reading Theory in Selected Grade School Classes.
By—Guszak, Frank J.
Univ. of Wisconsin, Madison Campus, Sch. of Educ.
Report Number CRP-S-437 Pub Date: 66
Report Number BR-5-8402
EDRS Price MF-$0.18 HC-$5.08 127P.

ED 010 209
Measures of Learning Rates for Elementary School Students in Mathematics and Reading Under a Program of Individually Prescribed Instruction.
By—Yeager, John L.
University of Pittsburgh
Report Number BR-5-0253-Thesis-1
EDRS Price MF-$0.18 HC-$3.68 92P.

ED 010 243
Analysis of Word Frequencies in Spoken Language of Children.
By—Beier, Ernst G. and Others
University of Utah, Salt Lake City
Report Number CRP-S-277 Pub Date: 65
Report Number BR-5-8036
EDRS Price MF-$0.09 HC-$0.84 21P.

ED 010 251
The Relation of Reading Achievement to One Aspect of "Realism" among 7- to 12-Year-Old Boys.
By—Solomon, Marilyn
New York Univ., School of Education
Report Number CRP-S-616-65 Pub Date: 66
Report Number BR-5-8380
EDRS Price MF-$0.18 HC-$2.40 60P.

ED 010 258
Translated Reading Tests as Culture-Fair Measures for Foreign Students.
By—Kumbaraci, Turkan E.
Columbia Univ., New York
Report Number CRP-S-177 Pub Date: 66
Report Number BR-5-8214
Contract OEC-5-10-108
EDRS Price MF-$0.18 HC-$4.96 124P.

ED 010 270
Nonovert Reinforced Cloze Procedure.
By—Bloomer, Richard H. and Others
University of Connecticut, Storrs
Report Number CRP-2245 Pub Date: 66
Report Number BR-5-0534
EDRS Price MF-$0.18 HC-$5.04 152P.

ED 010 274
School Achievement and Effect of Type Size on Reading in Visually Handicapped Children.
By—Birch, Jack W. and Others
University of Pittsburgh, School of Education
Report Number CRP-1766 Pub Date: 66
Report Number BR-5-0367
Contract OEC-4-10-028
EDRS Price MF-$0.27 HC-$6.64 166P.

ED 010 294
Patterns of Adult Information Seeking.
By—Parker, Edwin B. and Others
Stanford Univ. Inst. for Communication Res., Calif.
Report Number CRP-2583 Pub Date: Sep 66
Report Number BR-5-0083
Contract OEC-4-10-193
EDRS Price MF-$0.45 HC-$11.00 275P.

ED 010 307
Report of the First Research Planning Conference Held Under the Auspices of Project Literacy (Title Supplied)—Project Literacy Reports, No. 1.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N. Y.
Report Number CRP-F-034-1 Pub Date: Jul 64
Report Number BR-5-0617-1
Contract OEC-4-10-113
EDRS Price MF-$0.09 HC-$1.68 42P.

ED 010 308
Report of the Second Research Planning Conference Held Under The Auspices of Project Literacy in Chicago, Illinois, August 6-8, 1964—Project Literacy Reports, No. 2.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N.Y.
Report Number CRP-F-034-2 Pub Date: Sept 64
Report Number BR-5-0617-2
Contract OEC-4-10-113
EDRS Price MF-$0.09 HC-$2.32 58P.

ED 010 309
Report of the Third Research Conference Held Under the Auspices of Project Literacy in Swampscott, Massachusetts, September 25-27, 1964—Project Literacy Reports, No. 3.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N. Y.
Report Number CRP-F-034-3 Pub Date: Nov 64
Report Number BR-5-0617-3
Contract OEC-4-10-113
EDRS Price MF-$0.18 HC-$2.56 64P.

ED 010 310
Report of the Fourth Research Planning Conference Held Under the Auspices of Project Literacy in Princeton, New Jersey, December 11-13, 1964—Project Literacy Reports, No. 4.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N. Y.
Report Number CRP-F-034-4 Pub Date: Dec 64
Report Number BR-5-0617-4
Contract OEC-4-10-113
EDRS Price MF-$0.18 HC-$2.36 59P.

ED 010 311
The Analysis of Reading Skill, a Program of Basic and Applied Research—Project Literacy Reports, No. 5.
By—Levin, Harry and Others
Cornell Nniv., Ithaca, N.Y.
Report Number CRP-X-020-5 Pub Date: Nov 65
Report Number BR-5-0537-5
Contract OEC-6-10-028
EDRS Price MF-$0.09 HC-$2.20 55P.

ED 010 312
Report of the Fifth Research Planning Conference Held Under the Auspices of Project Literacy in New York, New York, December 10-12, 1965—Project Literacy Reports, No. 6.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N. Y.
Report Number CRP-X-020-6 Pub Date: Jan 66
Report Number BR-5-0537-6
Contract OEC-6-10-028
EDRS Price MF $0.09 HC-$2.32 58P.

ED 010 313
Reports of Research in Progress—Project Literacy Reports, No. 7.
By—Levin, Harry and Others
Cornell Univ., Ithaca, N. Y.
Report Number CRP-X-020-7 Pub Date: Sep 66
Report Number BR-5-0537-7
Contract OEC-6-10-028
EDRS Price MF-$0.18 HC-$3.80 95P.

ED 010 329
Demonstration of a Nongraded Plan of an Elementary School, Utilizing Team Teaching and Programed Instruction to Facilitate Learning in Reading and Mathematics.
By—Lewis, William P.
Troy State College, Ala.
Report Number BR-6-8669 Pub Date: Oct 66
Grant OEG-2-6-068669-1893
EDRS PRICE MF-$0.18 HC-$3.48 87P.

ED 010 330
An Experimental Study of the Group Versus the One-to-One Instructional Relationship in First Grade Basal Reading Programs.
By—MacDonald, James B. and Others
Univ. of Wisconsin, Madison Campus, Sch. of Educ.
Report Number CRP-2674 Pub Date: 66
Report Number BR-5-0485
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ERIC/CRIER PART OF SEATTLE IRA CONVENTION

ERIC/CRIER received its first full-scale exposure to the reading profession at large during the 12th Annual IRA Convention held in Seattle, Washington, May 2-6. A two-hour afternoon session opened the formal program of the Convention in the Rainier Room located in the former World's Fair Center. Dr. Lee Burchinal, Director of the newly formed Division of Information Technology and Dissemination of the USOE and leading force in the original establishment of ERIC, opened the formal session. He described the increasing need for systematic collection and dissemination of information in education and the function of the ERIC central coordinating unit. Present plans call for expansion of the total ERIC network with additional clearinghouses gradually added. Most clearinghouses will be moving into an operational phase by late 1967.

Dr. Leo Fay described the early history of ERIC/CRIER and stressed the close involvement of IRA in establishing the cooperative venture with Indiana University. His statement, "We have created something like a tremendous animal which has to be fed to stay alive and after it is fed, has to be used to work," emphasizes the need for close professional involvement and utilization of ERIC. Dr. James Laffey and Dr. Edward G. Summers described Clearinghouse operations in the areas of acquisition, indexing and vocabulary control, and expected services. Well over two hundred conventioneers found time during their busy schedules to attend the special early session and engaged in a lively question-answer exchange after the formal presentations.

During the convention a half-hour special television interview on ERIC/CRIER was taped and will be distributed through the NET system. The progress of the Clearinghouse was also discussed by the IRA Board of Directors. Numerous informal sessions were held with members of the acquisitions network and the ERIC/CRIER Advisory Board during the five-day convention. Dr. Theodore Clymer, Co-chairman of the Advisory Board, summed up the feeling of those who have been associated with the project with the statement that ERIC/CRIER is now a reality and its full potential will be realized only with the continued involvement of professionals engaged in teaching, administration, and research in reading at all levels.

INFORMATION BITS. . .

"Information Bits. . ." will be a continuing feature of the Newsletter. It will include incidental information from the Clearinghouse and the ERIC system, random notes from other information networks and information publications, reports of innovations in the communications world, and developments in library and information science. Readers' suggestions—and contributions—are welcomed. It's pleasant to receive information—as well as to report it!

—eric/crier—

Speaking of feedback: with ERIC/CRIER's Information Brief 2—a report on the initiation of *Research in Education*—was included a return postcard asking readers to indicate whether they or their libraries planned to subscribe to this monthly current awareness catalog and if they had first learned about *Research in Education* from ERIC/CRIER. Ninety percent of those returning cards said that they or their libraries were or would be subscribers to RIE. More than half of those replying—to our pleasure—reported that they learned about the catalog in the ERIC/CRIER Information Brief.

USOE has indicated a like positive response to *Research in Education* by both individuals and libraries.

—eric/crier—

The cover of the October, 1966 *EDUCOM*, the Bulletin of the Interuniversity Communication Council, was a photomicrograph of the human brain. Reason for the cover: the issue of *EDUCOM* was on Information Networks, and as the bulletin explained, the cerebral cortex is one of the most complex information networks. "In humans, it may contain 10 billion functional units. Each of the triangular cell bodies and twig-like dendrites in this photomicrograph done by Albert Globus and associates at UCLA's Brain Research Institute has 10,000 to 50,000 input channels—and can modify output in reaction to the unceasing chain of incoming nerve pulses." Gives a man a certain sense of dignity when standing next to a computer, doesn't it?

—eric/crier—

A prominent consultant is quoted in an article on information management in the February-March 1967 issue of *Information and Records Management* as saying that people waste "20 to 30 percent of their time just looking for information—not analyzing or using it." Obviously, the ERIC system hopes to cut down on this loss of valuable time—at least in the educational segment of our society.

—eric/crier—

Institutions, like individuals, advance in age and wisdom, and in the process develop their own jargon. Around the ERIC network, initials and acronyms are beginning to flow slippingly from tongues. Clearinghouse conversations are interspersed with comments like these: "Remind the indexers that DJF's are sent to NAA in triplicate." Translated, *DJF's* are Descriptor Justification Forms, the procedural forms used to submit new major indexing terms for the ERIC Thesaurus, and *NAA* is North American Aviation, the contracting agency which systematizes and processes the flow of documents for Central ERIC.

Move into the realm of documents and their distribution and you may overhear, "Alert readers to RIE, the new monthly publication of USOE which catalogs documents and announces their availability from EDRS in MF or HC." And as often as the *Newsletter* has mentioned it, readers must know that RIE is the acronym for *Research in Education*, a publication of USOE, the U. S. Office of Education, and that the reproduction media available from EDRS, the ERIC Document Reproduction Service, are microfiche (MF) and hard copy (HC)!

Soon this acronym will be added to the ERIC/CRIER vocabulary—REDLARS, the Reading Literature Analysis Retrieval System, our future project to answer questions from the research literature, using a computerized approach! Incidentally, across the desk today came an ad for *Acronyms and Initialisms Dictionary*, a new publication of Gale Research, Book Tower, Detroit. This volume, according to the publisher's ad, is a guide to 45,000 alphabetic designations, contractions, and initialisms. Have no fear; ERIC/CRIER does not plan to add to its vocabulary at a rate which will require a dictionary to translate Clearinghouse conversations or communications!

After thought: It is no longer necessary to identify ERIC/CRIER, is it?

—eric/crier—

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ERIC/CRIER is a joint project of the International Reading Association and Indiana University in cooperation with USOE.

ERIC/CRIER NEWSLETTER

The *ERIC/CRIER Newsletter* is a publication of the ERIC/Clearinghouse on the Retrieval of Information and Evaluation on Reading and is currently being distributed, experimentally, without charge to approximately 4,000 leaders in reading. In addition copies also go to individuals specifically requesting to be placed on the mailing list. Persons who would like to be added to the mailing list should send their name, address, and Zip Code to ERIC/CRIER, 200 Pine Hall, School of Education, Indiana University, Bloomington, Indiana 47401. The first few issues of the *Newsletter* will provide information and background on the development of ERIC/CRIER. The *Newsletter* is designed to collect information; inform users of current activities, services, projects, recent accessions; and act as a communications medium for the Clearinghouse.

THE ERIC/CRIER *NEWSLETTER* is:
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